

## SEQUENCE LISTING

<110> Cohen, David I.  
 <120> Tat-based Immunomodulatory Compositions and Methods for Their  
 Discovery and Use  
 <130> 51311-00009  
 <150> 60/553,733  
 <151> 2004-03-16  
 <160> 11  
 <170> PatentIn version 3.2  
 <210> 1  
 <211> 101  
 <212> PRT  
 <213> Human immunodeficiency virus type 1  
 <400> 1

Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser  
 1 5 10 15  
 Gln Pro Lys Thr Ala Cys Thr Thr Cys Tyr Cys Lys Lys Cys Cys Phe  
 20 25 30  
 His Cys Gln Val Cys Phe Thr Lys Lys Ala Leu Gly Ile Ser Tyr Gly  
 35 40 45  
 Arg Lys Lys Arg Arg Gln Arg Arg Ala Pro Glu Asp Ser Gln Thr  
 50 55 60  
 His Gln Val Ser Pro Pro Lys Gln Pro Ala Pro Gln Phe Arg Gly Asp  
 65 70 75 80  
 Pro Thr Gly Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu  
 85 90 95  
 Thr His Pro Val Asp  
 100

<210> 2  
 <211> 303  
 <212> DNA  
 <213> Human immunodeficiency virus type 1

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 gcctgcacca catgttactg caagaagtgc tgcttcact gccaggtgtg cttaccaag 120  
 aaggccttgg gcatcagcta cggccgcaag aagcgccggc agcgccgccg ggcccctgag 180  
 gacagccaga cccaccaggt gagccctccc aagcagcccg ctccacagtt ccgcggcgac 240  
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 gac 303

<210> 3  
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<400> 3

Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser Gln Pro  
 1 5 10 15

Lys

<210> 4  
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 <212> PRT  
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<400> 4

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Gln Pro Lys Val Pro  
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<210> 5  
 <211> 27  
 <212> PRT  
 <213> Simian immunodeficiency virus

<400> 5

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Ser Cys Ile Leu Glu Ala Asp Ala Thr Thr Pro  
 20 25

<210> 6  
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 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 6

Ser Asn Glu Arg Ser Ser Cys Glu Leu Glu Val  
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<210> 7  
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 <212> PRT  
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<400> 7

Cys Thr Thr Cys Tyr Cys Lys Lys Cys Cys Phe His Cys Gln Val Cys  
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<210> 8  
 <211> 50  
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<210> 9  
 <211> 63  
 <212> DNA  
 <213> Mus musculus

<400> 9  
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 ccc 63

<210> 10  
 <211> 33  
 <212> DNA  
 <213> Simian immunodeficiency virus

<400> 10  
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<210> 11  
 <211> 98  
 <212> PRT  
 <213> Artificial

<220>  
 <223> Modified immunostimulatory Tat

<400> 11

Met Glu Pro Ser Asn Glu Arg Ser Ser Cys Glu Leu Glu Val Pro Lys  
 1 5 10 15

Thr Ala Cys Thr Thr Cys Tyr Cys Lys Lys Cys Cys Phe His Cys Gln  
 20 25 30

Val Cys Phe Thr Lys Lys Ala Leu Gly Ile Ser Tyr Gly Arg Lys Lys  
 35 40 45

Arg Arg Gln Arg Arg Arg Ala Pro Glu Asp Ser Gln Thr His Gln Val  
 50 55 60

Ser Pro Pro Lys Gln Pro Ala Pro Gln Phe Arg Gly Asp Pro Thr Gly  
 65 70 75 80

Pro Lys Glu Ser Lys Lys Lys Val Glu Arg Glu Thr Glu Thr His Pro  
 85 90 95

Val Asp